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To theory of asymptotically stable accelerating universe in Riemann-Cartan spacetime

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Abstract

© 2014 IOP Publishing Ltd and Sissa Medialab srl. Homogeneous isotropic cosmological models built in the framework of the Poincaré gauge theory of gravity based on general expression of gravitational Lagrangian with indefinite parameters are analyzed. Special points of cosmological solutions for flat cosmological models at asymptotics and conditions of their stability in dependence of indefinite parameters are found. Procedure of numerical integration of the system of gravitational equations at asymptotics is considered. Numerical solution for accelerating Universe without dark energy is obtained.

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Keywords

Dark energy theory, Gravity, Modified gravity